

BE

#7 OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/700,708

DATE: 09/24/2001

TIME: 15:34:05

Input Set : A:\P20294.sL1.ST25.txt

Output Set: N:\CRF3\09242001\I700708.raw

3 <110> APPLICANT: ITAI, Akiko
 4 ITAI, Reiko
 5 TOMIOKA, Nobuo
 7 <120> TITLE OF INVENTION: Method For Predicting Functions of Protein
 9 <130> FILE REFERENCE: P20294
 11 <140> CURRENT APPLICATION NUMBER: 09/700,708
 12 <141> CURRENT FILING DATE: 2000-11-24
 14 <150> PRIOR APPLICATION NUMBER: PCT/JP98/02302
 15 <151> PRIOR FILING DATE: 1998-05-26
 17 <160> NUMBER OF SEQ ID NOS: 6
 19 <170> SOFTWARE: PatentIn version 3.0
 21 <210> SEQ ID NO: 1
 22 <211> LENGTH: 159
 23 <212> TYPE: PRT
 24 <213> ORGANISM: Escherichia coli
 26 <400> SEQUENCE: 1
 28 Met Ile Ser Leu Ile Ala Ala Leu Ala Val Asp Arg Val Ile Gly Met
 29 1 5 10 15
 31 Glu Asn Ala Met Pro Trp Asn Leu Pro Ala Asp Leu Ala Trp Phe Lys
 32 20 25 30
 34 Arg Asn Thr Leu Asp Lys Pro Val Ile Met Gly Arg His Thr Trp Glu
 35 35 40 45
 37 Ser Ile Gly Arg Pro Leu Pro Gly Arg Lys Asn Ile Ile Leu Ser Ser
 38 50 55 60
 40 Gln Pro Gly Thr Asp Asp Arg Val Thr Trp Val Lys Ser Val Asp Glu
 41 65 70 75 80
 43 Ala Ile Ala Ala Cys Gly Asp Val Pro Glu Ile Met Val Ile Gly Gly
 44 85 90 95
 46 Gly Arg Val Tyr Glu Gln Phe Leu Pro Lys Ala Gln Lys Leu Tyr Leu
 47 100 105 110
 49 Thr His Ile Asp Ala Glu Val Glu Gly Asp Thr His Phe Pro Asp Tyr
 50 115 120 125
 52 Glu Pro Asp Asp Trp Glu Ser Val Phe Ser Glu Phe His Asp Ala Asp
 53 130 135 140
 55 Ala Gln Asn Ser His Ser Tyr Cys Phe Lys Ile Leu Glu Arg Arg
 56 145 150 155
 58 <210> SEQ ID NO: 2
 59 <211> LENGTH: 223
 60 <212> TYPE: PRT
 61 <213> ORGANISM: Bovine
 63 <400> SEQUENCE: 2
 65 Ile Val Gly Gly Tyr Thr Cys Gly Ala Asn Thr Val Pro Tyr Gln Asx
 66 1 5 10 15
 68 Ser Leu Asn Ser Gly Tyr His Phe Cys Gly Gly Ser Leu Ile Asn Ser
 69 20 25 30
 71 Gln Trp Val Val Ser Ala Ala His Cys Tyr Lys Ser Gly Ile Gln Val
 72 35 40 45

ENTERED

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/700,708

DATE: 09/24/2001
TIME: 15:34:05

Input Set : A:\P20294.sL1.ST25.txt
Output Set: N:\CRF3\09242001\I700708.raw

74 Arg Leu Gly Glu Asp Asn Ile Asn Val Asx Glu Gly Asn Glu Gln Phe
75 50 55 60
77 Ile Ser Ala Ser Lys Ser Ile Val His Pro Ser Tyr Asn Ser Asn Thr
78 65 70 75 80
80 Leu Asn Asn Asp Ile Met Leu Ile Lys Leu Lys Ser Ala Ala Ser Leu
81 85 90 95
83 Asn Ser Arg Val Ala Ser Ile Ser Leu Pro Thr Ser Cys Ala Ser Ala
84 100 105 110
86 Gly Thr Gln Cys Leu Ile Ser Gly Trp Gly Met Thr Lys Ser Ser Gly
87 115 120 125
89 Thr Ser Tyr Pro Asp Asx Leu Lys Cys Leu Lys Ala Pro Ile Leu Ser
90 130 135 140
92 Asp Ser Ser Cys Lys Ser Ala Tyr Pro Gly Gln Ile Thr Ser Asn Met
93 145 150 155 160
95 Phe Cys Ala Gly Tyr Leu Glu Gly Lys Asp Ser Cys Gln Gly Asp
96 165 170 175
98 Cys Gly Gly Pro Val Val Cys Ser Gly Lys Leu Gln Gly Ile Val Ser
99 180 185 190
101 Trp Gly Ser Gly Cys Ala Gln Lys Asn Lys Pro Gly Val Tyr Thr Lys
102 195 200 205
104 Val Cys Asn Tyr Val Ser Trp Ile Lys Gln Thr Ile Ala Ser Asn
105 210 215 220
107 <210> SEQ ID NO: 3
108 <211> LENGTH: 124
109 <212> TYPE: PRT
110 <213> ORGANISM: Bovine
112 <400> SEQUENCE: 3
114 Lys Glu Thr Ala Ala Ala Lys Phe Glu Arg Gln His Met Asp Ser Ser
115 1 5 10 15
117 Thr Ser Ala Ala Ser Ser Ser Asn Tyr Cys Asn Gln Met Met Lys Ser
118 20 25 30
120 Arg Asn Leu Thr Lys Asp Arg Cys Lys Pro Val Asn Thr Phe Val His
121 35 40 45
123 Glu Ser Leu Ala Asp Val Gln Ala Val Cys Ser Gln Lys Asn Val Ala
124 50 55 60
126 Cys Lys Asn Gly Gln Thr Asn Cys Tyr Gln Ser Tyr Ser Thr Met Ser
127 65 70 75 80
129 Ile Thr Asp Cys Arg Glu Thr Gly Ser Ser Lys Tyr Pro Asn Cys Ala
130 85 90 95
132 Tyr Lys Thr Thr Gln Ala Asn Lys His Ile Ile Val Ala Cys Glu Gly
133 100 105 110
135 Asn Pro Tyr Val Pro Val His Phe Asp Ala Ser Val
136 115 120
138 <210> SEQ ID NO: 4
139 <211> LENGTH: 153
140 <212> TYPE: PRT
141 <213> ORGANISM: Whale
143 <400> SEQUENCE: 4
145 Val Leu Ser Glu Gly Glu Trp Gln Leu Val Leu His Val Trp Ala Lys

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/700,708

DATE: 09/24/2001

TIME: 15:34:05

Input Set : A:\P20294.sL1.ST25.txt

Output Set: N:\CRF3\09242001\I700708.raw

146 1 5 10 15
 148 Val Glu Ala Asp Val Ala Gly His Gly Gln Asp Ile Leu Ile Arg Leu
 149 20 25 30
 151 Phe Lys Ser His Pro Glu Thr Leu Glu Lys Phe Asp Arg Phe Lys His
 152 35 40 45
 154 Leu Lys Thr Glu Ala Glu Met Lys Ala Ser Glu Asp Leu Lys Lys His
 155 50 55 60
 157 Gly Val Thr Val Leu Thr Ala Leu Gly Ala Ile Leu Lys Lys Lys Gly
 158 65 70 75 80
 160 His His Glu Ala Glu Leu Lys Pro Leu Ala Gln Ser His Ala Thr Lys
 161 85 90 95
 163 His Lys Ile Pro Ile Lys Tyr Leu Glu Phe Ile Ser Glu Ala Ile Ile
 164 100 105 110
 166 His Val Leu His Ser Arg His Pro Gly Asp Phe Gly Ala Asp Ala Gln
 167 115 120 125
 169 Gly Ala Met Asn Lys Ala Leu Glu Leu Phe Arg Lys Asp Ile Ala Ala
 170 130 135 140
 172 Lys Tyr Lys Glu Leu Gly Tyr Gln Gly
 173 145 150
 175 <210> SEQ ID NO: 5
 176 <211> LENGTH: 186
 177 <212> TYPE: PRT
 178 <213> ORGANISM: Human
 180 <400> SEQUENCE: 5
 182 Val Gly Ser Leu Asn Cys Ile Val Ala Val Ser Gln Asn Met Gly Ile
 183 1 5 10 15
 185 Gly Lys Asn Gly Asp Leu Pro Trp Pro Pro Leu Arg Asn Glu Phe Arg
 186 20 25 30
 188 Tyr Phe Gln Arg Met Thr Thr Ser Ser Val Glu Gly Lys Gln Asn
 189 35 40 45
 191 Leu Val Ile Met Gly Lys Lys Thr Trp Phe Ser Ile Pro Glu Lys Asn
 192 50 55 60
 194 Arg Pro Leu Lys Gly Arg Ile Asn Leu Val Leu Ser Arg Glu Leu Lys
 195 65 70 75 80
 197 Glu Pro Pro Gln Gly Ala His Phe Leu Ser Arg Ser Leu Asp Asp Ala
 198 85 90 95
 200 Leu Lys Leu Thr Glu Gln Pro Glu Leu Ala Asn Lys Val Asp Met Val
 201 100 105 110
 203 Trp Ile Val Gly Gly Ser Ser Val Tyr Lys Glu Ala Met Asn His Pro
 204 115 120 125
 206 Gly His Leu Lys Leu Phe Val Thr Arg Ile Met Gln Asp Phe Glu Ser
 207 130 135 140
 209 Asp Thr Phe Phe Pro Glu Ile Asp Leu Glu Lys Tyr Lys Leu Leu Pro
 210 145 150 155 160
 212 Glu Tyr Pro Gly Val Leu Ser Asp Val Gln Glu Glu Lys Gly Ile Lys
 213 165 170 175
 215 Tyr Lys Phe Glu Val Tyr Glu Lys Asn Asp
 216 180 185
 218 <210> SEQ ID NO: 6

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/700,708

DATE: 09/24/2001

TIME: 15:34:05

Input Set : A:\P20294.sL1.ST25.txt

Output Set: N:\CRF3\09242001\I700708.raw

219 <211> LENGTH: 186
220 <212> TYPE: PRT
221 <213> ORGANISM: Escherichia coli
223 <400> SEQUENCE: 6
225 Val Gly Ser Leu Ser Leu Ile Ala Ala Leu Ala Gln Asn Met Gly Ile
226 1 5 10 15
228 Gly Lys Asn Gly Asp Leu Pro Trp Pro Pro Leu Pro Ala Asp Leu Ala
229 20 25 30
231 Trp Phe Lys Arg Asn Thr Leu Asp Lys Ser Val Glu Gly Lys Gln Asn
232 35 40 45
234 Leu Val Ile Met Gly Arg His Thr Trp Glu Ser Ile Gly Arg Pro Leu
235 50 55 60
237 Pro Gly Arg Lys Gly Arg Ile Asn Leu Val Leu Ser Arg Glu Leu Lys
238 65 70 75 80
240 Glu Pro Pro Gln Gly Ala His Phe Leu Ser Arg Ser Leu Asp Asp Ala
241 85 90 95
243 Leu Lys Leu Thr Glu Gln Pro Glu Leu Ala Asn Lys Val Asp Met Val
244 100 105 110
246 Met Val Ile Gly Gly Ser Val Tyr Lys Glu Ala Met Asn His Pro
247 115 120 125
249 Gly His Leu Lys Leu Tyr Leu Thr His Ile Met Gln Asp Phe Glu Ser
250 130 135 140
252 Asp Thr Phe Phe Pro Glu Ile Asp Leu Glu Lys Tyr Lys Leu Leu Pro
253 145 150 155 160
255 Glu Tyr Pro Gly Val Leu Ser Asp Val Gln Glu Glu Lys Gly Ile Lys
256 165 170 175
258 Tyr Lys Phe Glu Val Tyr Glu Lys Asn Asp
259 180 185

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/700,708

DATE: 09/24/2001

TIME: 15:34:06

Input Set : A:\P20294.sL1.ST25.txt

Output Set: N:\CRF3\09242001\I700708.raw